

## ABSTRACT OF THE DISCLOSURE

A manufacturing method for producing metal matrix composite (MMC) sheets without intermediate process losses associated with extrusion and rolling edge cracks. The method results in theoretical sheet yield rates from the initial MMC billet of up to 100%, compared to 30 to 60% yield rates for prior-art manufacturing processes. The methods in this invention comprise the following processes: (a) preparing a MMC powder mixture; (b) preparing a frame and a billet consolidation tool; (c) loading and compacting the MMC mixture to form a framed MMC compact; (d) consolidation of the framed MMC compact to form a framed MMC billet; (e) preparing the framed billet to be a framed roll-preform; and (e) rolling the framed roll-preform to MMC sheet.